

SECRET

Copy 8 of 9

25X1

NRO REVIEW COMPLETED

19 November 1962

MEMORANDUM FOR : The Record

SUBJECT : CACAST Engine Delivery Status
and Performance Improvements

REFERENCE : [redacted] dated 19 November 1962, titled
"Definitive - Main Control 2 and 2 Pilot
Int Program"

1. Attachment lists the contractor's current engine delivery estimates as presented on 14 November 1962 resulting from main control delivery problems described in reference memorandum. The contractor now estimates that nine engines will be delivered by 31 December 1962 instead of the fourteen engines heretofore forecast.

2. As of this date a total of six engines have been delivered with the 7th engine through final test and being prepared for shipment.

3. The 8th delivery engine was shipped 14 November 1962 before final acceptance test with a mock-up control for fitting to airplane number 125 in Burbank. This engine which must be returned to Hartford for final test is not included therefore in the nine engine delivery estimate for 31 December 1962. This estimate includes engines 201 through 210 less 208.

4. Engines 209 and 202 which were returned to Hartford for a mount change to accommodate airframe nacelle structural modification will receive other updating engineering changes including main and afterburner fuel control overhaul to the 1 or Mach 2 configuration. These engines are scheduled by the contractor for redelivery in January and February 1963 respectively. Control rework is the pending item.

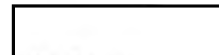
5. The following performance improvement changes are now scheduled by the contractor as follows:

(a) The "JOM afterburner package" is scheduled for production incorporation into engine 209 in December 1962. (Two flight test "JOM packages" are available for shipment now with the first scheduled for airlift 20 November 1962.)

25X1

SECRET

SECRET



25X1

Page 2

(b) Additional gas generator improvement changes involving compressor and turbine efficiency, burner can pressure loss, and turbine inlet profile are scheduled for production incorporation into delivery engine Z19 in March 1963 pending favorable development test evaluation on engine ID-1-3 scheduled for 15 December 1962. These improvements together with the "JCE afterburner" are expected by the contractor to yield a thrust of 1.5% below specification and a specific fuel consumption of from 4.5 to 12% shy of specification at 13,200 ft. altitude for maximum thrust conditions. Below 95% of maximum thrust, specific fuel consumption is expected to closely approach specification.

A part of these gas generator improvements is scheduled for production incorporation into delivery engine Z15 in February 1962.

SIGNED



25X1

DEVELOPMENT DIVISION
OIA-CD/E

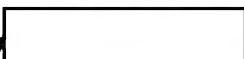
Attachment:

As stated

Distributions:

- 1-ID/R w/att
- 2-AD/SA w/att
- 3-C/ID/OSA w/att
- 4&5-ID/OSA w/att
- 6-TAES/OSA w/att
- 7-AFCU-5 w/att
- 8-ID/OSA w/att
- 9-ID (Chrono) w/att

DD/OSA



25X1

25X1

SECRET



SECRET

Attachment 1

25X1

DELIVERY SCHEDULE ESTIMATE

AS OF 14 NOVEMBER 1962

1962			1963											
Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
5	2/7	2/9	4/13	4/17	5/22	5/27	5/32	5/37	5/42	2/44	4/48	5/53	4/57	

14 November 1962

25X1

SECRET